

TITLE OF THE INVENTION

GENE EXPRESSION PROFILE FOR KSHV INFECTION AND METHODS FOR
TREATING SAME

5 **ABSTRACT OF THE INVENTION**

The present invention utilizes nucleic acid microarray technology to identify changes in the host endothelial cell transcription pattern that occurs during the latent and lytic phase of the KSHV life cycle. The production or activity of some genes up regulated during the lytic cycle were subsequently inhibited, and two such targets were shown to
10 have a role in expression of late viral genes. Using this combined approach we have identified cellular pathways previously unknown to be important for KSHV infection, and present evidence for the efficiency of the novel antiviral approaches thus discovered. In addition, the present invention identifies a wide variety of endothelial cells genes and pathways that are involved in a variety of endothelial cell-mediated
15 activity, including angiogenesis and transformation.